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10/807,694	03/24/2004	Harri Okkonen	15620US02	4407
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MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			CHOW, CHIH CHING	
			ART UNIT	PAPER NUMBER
			2192	

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/807,694

Applicant(s)

OKKONEN ET AL.

Examiner

Chih-Ching Chow

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/24/04, 7/20/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to amendment dated December 13, 2005.
2. Per Applicants' request, independent claims 1 and 17 have been amended, claims 32-39 are new.
3. Claims 1-39 remain pending.
4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/02/2005 has been entered.

### Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 2192

6. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/788,768. Although the conflicting claims are not identical, they are not patentably distinct from each other, from the comparison listed in the following table:

<b>Current Application (10/807,694) US 2004/0243993A1</b>	<b>Co-Application (10/788,768) US 2004/0230965A1</b>
<b>Claim 1</b>	<b>Claim 1</b>
<p>An electronic device network, the network comprising:</p> <ul style="list-style-type: none"> <li>a plurality of servers; and</li> <li>a plurality of electronic devices communicatively coupled to at least one of the plurality of servers, each of the electronic devices being adapted to employ at least one of a plurality of update agents resident in the electronic device, wherein the update agent employed is selected to correspond to a type of update information received by the electronic device from the at least one of the plurality of servers, wherein the selected update agent processes the received update information to modify a first version of one of software and firmware in the electronic device to a second version, and wherein the electronic device is also adapted to provision the plurality of update agents with parameters and data used to facilitate update operations in the electronic device.</li> </ul>	<p>A network that facilitates interactions between one of a plurality of <b>software components in a electronic device</b> and an associated one of a <b>plurality of servers in the network</b>, the network comprising: a service broker capable of receiving at least one request for service associated with one of the plurality of software components; the service broker capable of determining the one of the plurality of servers associated with the one of the plurality of software components, based upon the at least one request for service; and the service broker capable of forwarding the at least one request for service to the determined one of the plurality servers.</p>

Claim 1 of current application is anticipated by co-application claim 1 in that co-application claim 1 contains all the limitations of the current application claim 1. Claim 1 of the current application therefore is not patentably distinct from co-application claim 1 and as such is unpatentable for obvious-type double patenting.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claim 17 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 22 of copending Application No. 10/788,768. Although the conflicting claims are not identical, they are not patentably distinct from each other, from the comparison listed in the following table:

<b>Current Application (10/807,694) US 2004/0243993A1</b>	<b>Co-Application (10/788,768) US 2004/0230965A1</b>
<b>Claim 17</b>	<b>Claim 22</b>
A method employing a plurality of update agents in an electronic device in an electronic device network, the method comprising: communicatively coupling a plurality of electronic devices to at least one of a plurality of servers; selecting at least one of a plurality of update agents resident in the electronic device to modify a first version of one of software and firmware in the electronic device to produce an updated version, wherein each of the plurality of update agents is arranged to process a corresponding type of update information received from the at least one of a plurality of servers; and provisioning the plurality of update agents with parameters and data used to facilitate update operations in the electronic device.	A method for updating at least one of a software component and software component configuration information in a electronic device communicatively coupled to a service broker, the method comprising: under the control of the electronic device, registering at least one call-back function available in the software component; communicating, to the service broker, a request for updating of at least one of the software component and software component configuration; receiving results from a remote service provider; and invoking the at least one call-back function using the received results, under the control of the service broker, receiving an update request; determining a service provider based upon the update request; invoking update functionality on the determined service provider; and transmitting results of the invoked update functionality to the mobile device.

Claim 17 of current application is anticipated by co-application claim 22 in that co-application claim 22 contains all the limitations of the current application claim 17.

Claim 17 of the current application therefore is not patentably distinct from co-application claim 22 and as such is unpatentable for obvious-type double patenting.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claim 32 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/788,768. Although the conflicting claims are not identical, they are not patentably distinct from each other, from the comparison listed in the following table:

Current Application (10/807,694) US 2004/0243993A1	Co-Application (10/788,768) US 2004/0230965A1
Claim 32	Claim 1
An electronic device operable in an electronic device network, the electronic device comprising: non-volatile memory comprising a first version of code; communication circuitry for receiving, from at least one server in the electronic device network, update information having an associated type; code resident in and executable by the electronic device, the code comprising a plurality of update agents selectable to cause processing of a corresponding type of received update information, to update a related code portion of the first version of code to an updated version; wherein the processing modifies the related code portion of the first version of code to produce the updated version; and wherein an update agent is selected to perform an update based upon the type of the received update information.	A network that facilitates interactions between one of a plurality of <b>software components in a electronic device</b> and an associated one of a <b>plurality of servers in the network</b> , the network comprising: a service broker capable of receiving at least one request for service associated with one of the plurality of software components; the service broker capable of determining the one of the plurality of servers associated with the one of the plurality of software components, based upon the at least one request for service; and the service broker capable of forwarding the at least one request for service to the determined one of the plurality servers.

Claim 32 of current application is anticipated by co-application claim 1 in that co-application claim 1 contains all the limitations of the current application claim 32. Claim 32 of the current application therefore is not patentably distinct from co-application claim 1 and as such is unpatentable for obvious-type double patenting.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### **Claim Rejections - 35 USC § 103**

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-7, 9-22, 24-39 are rejected under 35 U.S.C. 103(a) as being obvious over US 2004/0031029 by Lee et al., hereinafter "Lee", in view of Bindu Rama Rao, US Patent No. 6,941,453 (hereinafter "Rao").

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is

Art Unit: 2192

the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(1)(1) and § 706.02(1)(2).

### CLAIM

1. An electronic device network, the network comprising:  
a plurality of servers; and  
a plurality of electronic devices communicatively coupled to at least one of the plurality of servers, each of the electronic devices being adapted to employ at least one of a plurality of update agents resident in the electronic device, wherein the update agent employed is selected to correspond to a type of update information received by the electronic device from the at least one of the plurality of servers, wherein the selected update agent processes the received update information to update modify a first version of one of software and firmware in the electronic device to a second version, and wherein the electronic device is also adapted to provision the plurality of update agents with parameters and data used to facilitate update operations in the electronic device.

### Lee / Rao

Lee teaches a method for updating software on a plurality of networked devices. See Lee's paragraph 0009, "updating a plurality of software components disposed on a **plurality of networked devices**, the plurality of networked devices being interconnected if a computer network...the method further includes obtaining, using the **first local update agent** and the **first update parameters**, a **first update file** for **updating software in the first networked device**. Additionally, the method includes updating, using the first local update agent and the first update file, the software in the first networked device." And paragraph 0032, "Administrative console 104 is coupled via the network to a **plurality of networked devices** such as servers 106, 108, and 110." Lee teaches all aspects of claim 1, but he does not mention 'update agent is selected to correspond to a type of update information' specifically, however, Rao teaches it in an analogous prior art. In Rao's abstract, "Disclosed herein is a method for **updating** at least one of firmware, software, device components, and device configuration in an **electronic device**." column 1, lines 54-55, "a method of **updating at least one of firmware and software in an electronic device comprising a plurality of update agents**." And lines 57-58, "The update agents may



2. The network according to claim 1, wherein the electronic device comprises random access memory and non-volatile memory, wherein the non-volatile memory comprises a plurality of components, the plurality of components comprising at least one of the following: an update application loader, the plurality of update agents, firmware, an operating system (OS), and provisioned data, wherein the provisioned data comprises update agent provisioning information and a number assignment module.

**be associated with at least one update.”;** and lines 60-62, **“invoking the selected update agent based upon information corresponding to a particular update (provision the update agents with parameters and data), and performing the particular update.”**

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee’s disclosure of the updating software for networked devices by using selected update agent for a corresponding type of update taught by Rao, for the purpose of ‘communication circuitry’, updating at least one of firmware and software in an electronic device comprising a plurality of update agents (Rao’s column 1, line 54).

For the feature of claim 1 see claim 1 rejection. For the rest of claim 2 feature see Lee’s paragraph 0001, “These networked devices include, for example, routers, hubs, servers, workstations, desktop computers, laptop computers, printers, storage devices, printers and/or other output devices, and the like (*all are electronic devices*). As is well known, each of the networked devices may include many different hardware components each of which may be furnished with software (such as system software, application software, firmware, driver, or the like)” Also see Rao’s Fig. 1, **OS** (item 119), **RAM** (item 125), and **non-volatile memory** (item 111). For ‘update application loader’ see Rao’s Fig. 1, item 127 and the description in Rao’s column 2, lines 14-15, “In an embodiment according to the present invention, the method may further comprise executing an update

**application loader**". For 'provisioning information' feature see Lee's Fig. 3 and description in paragraph 0035, "administrative console 302 is also shown communicably coupled to a database 306 (*provisioning data*) and a **notification module 308**. (*a number assignment module*) Database 306 represents the database that contains the **update parameters 310** for the software components in the network."

3. The network according to claim 1, wherein the network further comprises at least one of an update server, and a plurality of generators, wherein the generators are adapted to generate updates able to be processed by at least one provisioned update agent in the electronic device, and wherein the update server is adapted to store updates accessible by the plurality of servers.

For the feature of claim 1 see claim 1 rejection. For the rest of claim 3 feature, generating updates provided from plurality of agents in particular, see Rao's column 1, lines 53-54, "updating at least one of firmware and software in an electronic device comprising a plurality of update agents." And column 9, lines 4-8, "the file extension 'dup' may correspond to updates generated by an **update application generator**. An **update application generator** may be adapted to **determine appropriate update(s)** for an electronic device."

4. The network according to claim 1, wherein the electronic device further comprises a provisioned data unit adapted to store information related to an end-user's electronic device subscription, and wherein the provisioned data unit may be programmed during number assignment module programming activity.

For the feature of claim 1 see claim 1 rejection. For the rest of claim 4 feature see claim 1 and Lee's paragraph 00037, "Notification module 308 represents the module for collecting the status information and/or notification messages from the various components of the automatic software update system. The notification messages may be sent to administrator console 302 and/or may be employed to automatically trigger other steps." And description on paragraph 0039 (*programmed number assignment module for programming activity*).

5. The network according to claim 4, wherein the number assignment module programming activity comprises at least one of over-the-air service provisioning (OTASP) activity and over-the-air parameter administration (OTAPA) activity.

Lee teaches all aspects of claim 5, but he does not mention 'over-the-air service' specifically, however, Rao teaches it in an analogous prior art. In Rao's column 1, lines 34-36, "Electronic devices (i.e., **mobile electronic devices** (over-the-air communication) having software/firmware), for example, **mobile cellular phones, personal digital assistants (PDA's), pagers, MP3 players, digital cameras**, etc. often contain firmware and/or application software that are either provided by the manufacturers of the electronic devices, telecommunication carriers (*with communication circuitry for the communications stated above*)". It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee's disclosure of the updating software for networked devices by using over-the-air communication taught by Rao, for the purpose of updating various type of electronic devices (see Rao's column 3, lines 12-13).

6. The network according to claim 4, wherein the provisioned data unit is adapted to store at least one of update agent related provisioning information, a universal resource locator of a server used to retrieve updates, and a security key used to authenticate server messages.

For the feature of claim 4 see claim 4 rejection. For the rest of claim 6 see Lee's paragraph 0055, "In one embodiment, the update file(s) are stored on a shared storage device coupled to the network and are accessed by their path name(s), which may be received as part of the update parameters. In another embodiment, the update file(s) are **accessed by their URL (Uniform Resource Locator)**, which may be received as part of the update parameters and downloaded using the HTTP protocol" and see Rao's column 2, lines 37-39, "In an embodiment according to the present

7. The network according to claim 4, wherein each of the plurality of update agents has a corresponding entry in the provisioned data unit.

invention, the method may further comprise conducting a **security check** (authenticate server messages) to determine whether a selected **update agent** is permitted to update sections”.

For the feature of claim 4 see claim 4 rejection. For the rest of claim 7 see Rao’s Figure 4B, each of the **update agents** has its own corresponding entry in the Update Agent Table (*provisioned data unit*).

9. The network according to claim 1, wherein the electronic device is adapted to display a list of available update agents to an end-user and solicit selection of an update agent to be used to update at least one of software and firmware.

For the feature of claim 1 see claim 1 rejection. For the rest of claim 9, generating updates provided from plurality of agents in particular, see Rao’s abstract, “An electronic device supporting multiple update agents may be adapted to prompt and **facilitate an end-user to select at least one of the update agents** to process update information contained in at least one update.”

10. The network according to claim 1 wherein the electronic device is adapted to invoke an update agent based upon an update currently being processed provided that the update agent is provisioned in the electronic device.

See claim 1 rejection.

11. The network according to claim 1, wherein the electronic device may execute an update application loader on reboot, and wherein the update application loader is adapted to invoke a boot initialization code before determining to update the electronic device.

For the feature of claim 1 see claim 1 rejection. For the rest of claim 11 see Lee’s paragraph 0023, “The local update agent then obtains the update file, performs the installation as required (**which may include rebooting the networked device after installation**)”.

12. The network according to claim 1, further comprising update agent provisioning information stored in the

For the feature of claim 1 see claim 1 rejection. For the rest of claim 12, see Lee paragraph 0055, “In one embodiment, the

electronic device, the update agent provisioning information comprising at least one of the following: a device server URL, an index of provisioned update agents, a security key, and electronic device related information, wherein the device server URL provides references to servers hosting updates to be downloaded, and wherein the update are compatible with update agents currently available and provisioned in the electronic device.

13. The network according to claim 12, wherein the index of provisioned update agents provides an index value used to compute an address location of a provisioned update agent, and wherein the index of provisioned update agents provides an index to a table containing an address for an update agent in non-volatile memory the electronic device.

14. The network according to claim 12, wherein the security key is used to authenticate updates during download of updates and during update activity, wherein a separate security key is employed to authenticate updates by a download agent and by the update agent, and wherein the security key is employed for at least one of the following: secure communication, encryption, and decryption of data and messages during communication with external systems.

15. The network according to claim 1, wherein the electronic device further comprises an update agent table resident in non-volatile memory, the update agent table containing references to a plurality of

update files(s) are stored on a shared storage device coupled to the network and are accessed by their path name(s), which may be received as part of the update parameters. In another embodiment, the update file(s) are **accessed by their URL (Uniform Resource Locator)**, which may be received as part of the update parameters and downloaded using the HTTP protocol.”

For the feature of claim 12 see claim 12 rejection. For the rest of claim 13, see claim 7 rejection.

For the feature of claim 12 see claim 12 rejection. For the rest feature of claim 14 see claim 6 rejection.

For the feature of claim 1 see claim 1 rejection. For the rest feature of claim 15 see Rao's FIG. 4B '**Update Agent Table**', and description, "FIG. 4B is a block diagram illustrating an exemplary update

update agents currently available and provisioned in the electronic device, the update agent table associating update agent names, update agent address locations, types of updates that the update agents are adapted to process, and provisioning status of the update agents for all available update agents in the electronic device.

**agent table located in a non-volatile memory of an electronic device according to an embodiment of the present invention.”**

16. The network according to claim 1, wherein the electronic device comprises at least one of a plurality of mobile electronic devices, and wherein the plurality of mobile electronic devices comprise at least one of the following: a mobile cellular phone handset, a personal digital assistant, a pager, an MP3 player, and a digital camera.

For the feature of claim 1 see claim 1 rejection. For the rest feature of claim 16 see claim 5 rejection.

17. A method employing a plurality of update agents in an electronic device in an electronic device network, the method comprising:  
communicatively coupling a plurality of electronic devices to at least one of a plurality of servers;  
~~employing~~ selecting at least one of a plurality of update agents resident in the electronic device to ~~update~~ modify a first version of one of software and firmware in the electronic device to produce an updated version, wherein each of the plurality of update agents is arranged to process a corresponding type of update information received from the at least one of a plurality of servers; and  
provisioning the plurality of update agents with parameters and data used to facilitate update operations in the electronic device.

Lee and Rao's disclosures definitely employs a 'method' which does all the features in recited in claim 17. See claim 1 rejection.

18. The method according to claim 17,

For the feature of claim 17 see claim 17

further comprising generating updates able to be processed by at least one provisioned update agent in the electronic device and storing updates in an update server.

19. The method according to claim 17, further comprising:

storing information related to an end-user's electronic device subscription; and  
programming a provisioned data unit during number assignment module programming activity.

20. The method according to claim 19, wherein the number assignment module programming activity comprises at least one of the following: over-the-air service provisioning (OTASP) activity and over-the-air parameter administration (OTAPA) activity.

21. The method according to claim 19, wherein the programming further comprises storing update agent related provisioning information, a universal resource locator of a server used to retrieve updates, and a security key used to authenticate server messages.

22. The method according to claim 19, further comprising providing each update agent an entry in a provisioned data unit.

24. The method according to claim 17, further comprising:

displaying a list of available update agents to an end-user; and  
soliciting selection of an update agent to be used to update at least one of software and firmware.

rejection. For the rest of claim 18 feature see claim 1 and claim 3 rejections.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 19 feature see claim 4 rejection.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 20 feature see claim 5 rejection.

For the feature of claim 19 see claim 19 rejection. For the rest of claim 21 feature see claim 6 rejection.

For the feature of claim 19 see claim 19 rejection. For the rest of claim 22 feature see claim 7 rejection.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 24 feature see claim 9 rejection.

25. The method according to claim 17, further comprising invoking an update agent based upon an update currently being processed provided that the update agent is provisioned in the electronic device.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 25 feature see claim 10 rejection.

26. The method according to claim 17, further comprising executing an update application loader on reboot of the electronic device and invoking a boot initialization code before determining to update the electronic device.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 26 feature see claim 11 rejection.

27. The method according to claim 17, further comprising:  
    storing update agent provisioning information in the electronic device; and  
    hosting updates to be downloaded with update agents provisioned in the electronic device.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 27 feature see claim 1 rejection.

28. The method according to claim 17, further comprising determining an address location of a provisioned update agent, wherein determining comprises one of computing and accessing an entry in a table.

For the feature of claim 17 see claim 17 rejection. For the rest feature of claim 28, generating updates provided from plurality of agents (addresses) in particular, see Rao's column 3, lines 1-5, "The update agent table may map at least one of update agent names, **update agent address locations, type information corresponding to updates that particular update agents are adapted to process, and availability (*authentication*) of particular update agents.**"

29. The method according to claim 17, further comprising:  
    authenticating updates during download of the updates and during update activity, using a security key;  
    employing a separate security key to

For the feature of claim 17 see claim 17 rejection. For the rest of claim 29 feature see claim 6 rejection.



authenticate updates by a download agent and by the at least one of a plurality of update agents; and  
employing the security key for at least one of the following: secure communication, encryption, and decryption of data and messages, during communication with external systems.

30. The method according to claim 17, further comprising mapping at least one of update agent names, update agent address locations, types of updates that the update agents are adapted to process, and provisioning status of the update agents for all available update agents in the electronic device.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 30 feature see claim 15 rejection.

31. The method according to claim 17, wherein the electronic device comprises at least one of the following: a plurality of mobile electronic devices, and wherein the plurality of mobile electronic devices comprise at least one of a mobile cellular phone handset, a personal digital assistant, a pager, an MP3 player, and a digital camera.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 31 feature see claim 16 rejection.

32. (New) An electronic device operable in an electronic device network, the electronic device comprising:  
non-volatile memory comprising a first version of code;  
communication circuitry for receiving, from at least one server in the electronic device network, update information having an associated type;  
code resident in and executable by the electronic device, the code comprising a plurality of update agents selectable to cause processing of a corresponding type of

Both Lee and Rao's disclosures teach the features of claim 32, see claims 1, 2, and 3 rejections.

received update information, to update a related code portion of the first version of code to an updated version;

wherein the processing modifies the related code portion of the first version of code to produce the updated version; and

wherein an update agent is selected to perform an update based upon the type of the received update information.

33. (New) The electronic device according to claim 32 wherein the communication circuitry comprises a cellular network interface.

For the feature of claim 32 see claim 32 rejection. For the rest of claim 33 feature see claim 5 rejection.

34. (New) The electronic device according to claim 32 wherein the update information comprises an update package.

For the feature of claim 32 see claim 32 rejection. For the rest of claim 34 feature see claim 7 rejection, where update agent is the same as update package.

35. (New) The electronic device according to claim 32 wherein a portion of the non-volatile memory comprises provisioned data received from at least one of the plurality of servers.

For the feature of claim 32 see claim 32 rejection. For the rest of claim 35 feature see claims 1, 2 and 7 rejections.

36. (New) The electronic device according to claim 35 wherein the provisioned data comprises at least one entry corresponding to one of the plurality of update agents.

For the feature of claim 32 see claim 32 rejection. For the rest of claim 36 feature see claim 7 rejection, where 'type of update agent' is the provisioned data.

37. (New) The electronic device according to claim 35 wherein programming of provisioned data is performed during programming of information related to a wireless service subscription.

For the feature of claim 32 see claim 32 rejection. For the rest of claim 37 feature see claim 5 rejection.

38. (New) The electronic device according to claim 35 wherein provisioned data comprises a universal resource locator of a server on which a corresponding type of

For the feature of claim 35 see claim 35 rejection. For the rest of claim 37 feature see claim 12 rejection.

update information is stored.

39. (New) The electronic device according to claim 35 wherein provisioned data comprises security information enabling update of the related code portion.

For the feature of claim 35 see claim 35 rejection. For the rest of claim 37 feature see claims 6 and 28 rejections.

14. Claims 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0031029 by Lee et al., hereinafter "Lee", in view of US Patent No. 6,941,453 by Bindu Rama Rao, (hereinafter "Rao"), further in view of US Patent No. 5,708,776 by Dan Kikinis (hereinafter "Kikinis").

#### CLAIM

8. The network according to claim 1, wherein one of the plurality of update agents is designated a primary update agent and another of the plurality of update agents is designated as a secondary update agent, and wherein the primary update agent is used to perform updates during one of power up and reboot of the electronic device and the secondary update agent is used to perform updates not requiring electronic device rebooting.

#### Lee/ Rao / Kikinis

For the feature of claim 1 see claim 1 rejection. Lee and Rao teach all aspects of claim 8, but he does not mention 'Primary update agent and secondary update agent' specifically, however, Kikinis teaches it in an analogous prior art. All of their disclosures are for updating agents cross network and reboot of an electronic device. See Kikinis' title, "Automatic recovery for network appliances" in particular, see Kikinis column 1, lines 53-59, "a **primary boot partition** on the mass storage device, comprising primary operating software and primary application software for execution by the CPU in **booting** the network appliance and placing it in operation performing its application; a **secondary boot partition** on the mass storage device, comprising secondary operating software and secondary application software; and an automatic recovery routine on the non-volatile storage device."

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Lee and Rao's disclosures of the updating software for networked devices by using Primary

Update/Secondary Update (while there are plurality of update agents) taught by Kikinis, for the purpose of initiating necessary reboot (Kikinis Abstract, line 3).

23. The method according to claim 17, further comprising:  
    designating a primary update agent and a secondary update agent;  
    using the primary update agent to perform updates during one of the following: power up and reboot of the electronic device; and  
    using the secondary update agent to perform updates not requiring electronic device rebooting.

For the feature of claim 17 see claim 17 rejection. For the rest of claim 19 feature see claim 8 rejection.

### Conclusion

The following summarizes the status of the claims:  
35 USC § 103 rejection: Claims 1-39

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature of relating to the status of this application should be directed to the **TC2100 Group receptionist: 571-272-2100**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

Art Unit: 2192

more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Ching Chow

Examiner

Art Unit 2192

February 28, 2005

CC

A handwritten signature in black ink, appearing to read 'Tuan Dam', with a long horizontal stroke extending to the right.

TUAN DAM  
SUPERVISORY PATENT EXAMINER